JAPANESE /

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Changes for the Better

PROGRAMMARI E CONTROLLERS

FX3U-7DM

USER'S MANUAL



| Manual Number | JY997D17101 |
|---------------|----------------|
| Revision | С |
| Date | September 2007 |

his manual describes the part names, dimensions, mounting an specifications of the product. Before use, read this manual and the manuals of all relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and

Store this manual in a safe place so that it can be taken out and read whenever necessary. Always forward it to the end user Registration:

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ffective Sentember 2007

Specifications are subject to change without notice

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Safety Precaution (Read these precautions before use.)

This manual classifies the safety precautions into two categories: **♦DANGER** and **↑**CAUTION



Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.



Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Depending on the circumstances, procedures indicated by ACAUTION may also cause severe injury.

It is important to follow all precautions for personal safety.

Associated Manuals

| Manual name | Manual No. | Description |
|--|--------------------------------------|--|
| FX3U-7DM-HLD User's Manual | JY997D15401 | Explains the FX3U-7DM-HLD display module holder specifications for external dimensions and installation. |
| FX3U Series User's Manual - Hardware Edition | JY997D16501 MODEL CODE: 09R516 | Explains the FX3U Series PLC specifications for I/O, wiring, installation, and maintenance. |
| FX3UC Series JY997D28701 User's Manual MODEL CODE: - Hardware Edition 09R519 | | Explains the FX3UC Series PLC specifications for I/O, wiring, installation, and maintenance. |

For the operation of the display module, refer to the PLC main unit manual

→ Refer to the FX3U Series User's Manual - Hardware Edition → Refer to the FX3UC Series User's Manual - Hardware Edition

How to obtain manuals

For product manuals or documents, consult with the Mitsubishi Electric dealer from who you purchased your product.

Applicable standard

FX3U-7DM units made in May, 2005 or later comply with the EC Directive (EMC Directive). Further information can be found in the following manual. However, the FX3UC-32MT-LT does not comply with the EC Directive (EMC Directive).

→ Refer to the FX3U Series Hardware Manual (Manual No. JY997D18801)

1. Outline

The FX3U-7DM display module (hereinafter called display module) is installed to the FX3U / FX3UC-32MT-LT (provided as standard equipment) PLC main unit to display messages (alphabet, numbers, and Japanese characters) or to monitor/change device

1.1 Incorporated Items

Verify that the following product and items are included in the package:

FX3U-7DM display -module Display module mounting top cover







Manual

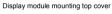
1.2 External Dimensions and Part Names

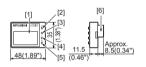
Unit: mm (inches)

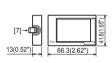
MASS (Weight): Display module 20g (0.05lbs)

Display module mounting top cover 10g (0.03lbs)

Display module







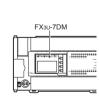
| Ī | No. | Name | Description |
|---|-----|-------------------------|---|
| | [1] | Display | Displays current time and monitored status of device. |
| | [2] | "ESC" button | Use to cancel operation or return to previous screen. |
| | [3] | "-" button | Use to move cursor or set the value. |
| | [4] | "+" button | Use to move cursor or set the value. |
| | [5] | "OK" button | Use to choose the item, set the value, etc. |
| | [6] | Connector for main unit | Used to connect display module to main unit. |
| | [7] | Top cover fixing hook | Fixes the display module installing top cover on PLC. |

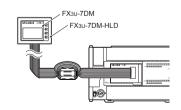
1.3 Installation Example

Install to main unit

Install to control panel

→ For installation, refer to FX3U-7DM-HLD





2. Installation and Remove

INSTALLATION PRECAUTIONS

DANGER

Make sure to cut off all phases of the power supply externally before attempting installation or wiring work. Failure to do so may cause electric shock or damage to the product.

INSTALLATION PRECAUTIONS

♠ CAUTION

Use the product within the generic environment specifications described in PLC main unit manual (Hardware Edition).

Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl2, H2S, SO2, or NO2), flammable gas, vibration or impacts, or exposed to high temperature, condensation, or rain and wind. If the product is used in such conditions, electric shock, fire, malfunctions deterioration or damage may occur.

- Do not touch the conductive parts of the product directly. Doing so may cause device failures or malfunctions.
- Connect display module securely to their designated connectors. Loose connections may cause malfunctions.

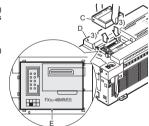
The following section describes the installation method for the FX3U/FX3UC-32MT-LT Series PLC (FX3U Series PLC is used for the following example). For more details on installation and removal, refer to the PLC main unit manual.

→ Refer to the FX3U Series User's Manual - Hardware Edition → Refer to the FY3UC Series User's Manual - Hardware Edition

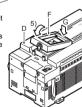
- 1) Power off the PLC.
- 2) Pushing the top cover hook (fig. A), remove the top cover (fig. B), as shown in the right figure.



3) When installing Install the display module (fig. C) to E on the main unit (fig. D) as indicated with the arrow 3). When removing Remove the display module (fig. C) from the main unit (fig. D) as indicated with the arrow 3)'.



- 4) Place the G side of the display module mounting top cover (fig. F) onto the main unit (fig. D).
- 5) The display module mounting top cover (fig. F) is installed in the Main module (fig. D) as shown in the



3. Specifications

STARTUP AND MAINTENANCE PRECAUTIONS

⚠ CAUTION

- Do not disassemble or modify the PLC.
- Doing so may cause fire, equipment failures, or malfunctions. * For repair, contact your local Mitsubishi Electric distributor.
- Do not drop the product or exert strong impact to it. Doing so may cause damage

DISPOSAL DECALITIONS

⚠ CAUTION

Please contact a certified electronic waste disposal company for the environmentally safe recycling and disposal of your device.

TRANSPORT AND STORAGE PRECAUTIONS

∴ CAUTION

The product is a precision instrument. During transportation, avoid any impacts Failure to do so may cause failures in the product. After transportation, verify the operations of the product.

3.1 Applicable PLC

| Model | Applicability |
|--------------------|--|
| FX3U Series PLC | Ver. 2.20 or later (from first production) |
| FX3UC-32MT-LT PLC* | Ver. 1.00 or later (from first production) |

* FX3UC-32MT-LT has this display module provided as standard equipment.

3.2 Display Specifications

| Item | | Description |
|---------------------------|------------------------------|--|
| Display device/ backlight | | STN monochrome liquid crystal display/ Backlight: LED (green) |
| | Number of letters | 16 letters × 4 lines (2 byte letter: 8 letters × 4 lines) |
| Displayed letters | Character | Alphabets, Numbers, Japanese character, Shift JIS Level-1, 2 |
| | Language for menu display | Japanese/English |
| Button | | 4 operation buttons (OK, ESC, +, and -) |

3.3 General Specifications

The general specifications are equivalent to the PLC main unit. For general specifications, refer to the following manuals.

- → Refer to the FX3U Series User's Manual Hardware Edition
- → Refer to the FX3UC Series User's Manual Hardware Edition

3.4 Power Supply Specifications

5V DC, 20 mA is supplied from the internal power supply of the main unit.

4. Function List

For the function list, refer to the PLC main unit manual.

- → Refer to the FX3U Series User's Manual Hardware Edition
- → Refer to the FX3UC Series User's Manual Hardware Edition

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For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
- This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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